Section 5-1400 Landscaping - Buffer Yards, Screening, Parking, and Landscape Plans 5-1401 **Purpose.** The purpose and intent of this Section is to foster attractive and harmonious development through the use of landscaping; to minimize the harmful impacts of noise, dust and other debris, motor vehicle headlight glare or other artificial light intrusion; to protect property values by reducing visual impacts and land use conflicts; provide shade; enhance natural drainage systems; to contribute to ecosystem benefits; and to preserve and promote the health, safety and general welfare of the public. 10 5-1402 11 Applicability. 12 (A) The provisions of this Section shall apply to all land development 13 applications filed in accordance with the provisions of Division C 14 and Division D of Article 6 of this Ordinance that propose 15 establishment of a use, except for zoning permits for single family dwellings on existing lots.where site plan, sketch plan, and /or 16 17 subdivision applications are filed in accordance with the 18 provisions of Section 6-700 of this Ordinance or the Land 19 Subdivision and Development Ordinance, except for the 20 Subdivision applications in the AR-1, AR-2, A-10, A-3, 22. JMLA-20, TR-10, and TR-3 Zoning Districts, except that 23 the building and parking setbacks of Section 5-1403(B) and the cemetery, burial ground, and grave buffer of Section 5-1404(G)(2) shall be observed. All requirements of this 24 2.5 section shall remain applicable for site plan and sketch plan 26 27 applications in these districts. Boundary line adjustment, low density development waiver, 28 29 and dedication plat applications. 30 31 (B) The provisions of this Section are intended to complement the 32 regulations of Section 5-1300 of this Ordinance. Trees planted to 33 fulfill the Canopy requirements of Section 5-1300 may also fulfill the Buffering and Screening requirements of this Section. (C) Existing vegetation which is suitable for use in compliance with 36 the requirements of this Section, may be used as required planting 37 when supplemented by new vegetation, if needed, so as to provide 38 buffering and screening in accordance with the purpose and intent 39 of this Section. Such existing vegetation shall be shown on a Tree Conservation Plan in accordance with the Facilities Standards

Commented [EJ1]: ZOAG: Recommend revising to clarify that buffer requirements do not apply to certain de minimis land development applications. Also recommend that rural subdivisions be exempt if proposing lots of certain size (i.e. 5 acres).

Commented [EJ2R1]: RESPONSE: Updated to specifically apply buffer standards to land development proposed via site plan, sketch plan, and/or subdivision applications, rather than "any application" establishing a use. This text is consistent with current applicability standards and helps avoid unintended application of buffer requirements to de minimis applications.

Commented [EJ3]: ZOAG: Need to clarify when buffer yards are required for rural subdivisions.

Commented [EJ4R3]: RESPONSE: This section has been revised to exempt subdivision applications in zoning districts with a maximum gross density of 1 du per 3 acres or less. The buffer standards would apply if a use requiring site plan or sketch plan approval is proposed on an individual lot.

Commented [EJ5]: DPZ STAFF: Need to specify that a tree conservation plan is required per FSM.

Commented [EJ6R5]: RESPONSE: Revised as requested.

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Manual.

(D) Where any provision of this Section imposes restrictions or standards different from those of Section 5-1300 or any other County ordinance or regulation or other provision of law, whichever provisions are more restrictive or impose higher standards shall control, unless the intent is clearly otherwise.

5-1403 Road Corridor Buffers and Setbacks

- (A) Road Corridor Buffers and Setbacks, General Provisions.
 - (1) Road Corridor Buffers and Setbacks shall be provided along the front yard of a property in accordance with the Road Corridor Buffer and Setbacks Matrix, except for development requiring a plan of subdivision but not a site plan, which shall be subject to the requirements of Section 5-1303(B). Road classifications shall be determined by the Countywide Transportation Plan.
 - (1)(2) The following zoning districts shall only require the Road Corridor Buffer Type specified in Table 5-1403(B) along the edges of the development boundary which abut a road: PD-CC, PD-TC, PD-TRC, PD-TREC, PD-RV, and PD-MUB. Roads internal to a development boundary in these districts shall be subject to the street tree requirements in the district regulations.
 - (2)(3) Certain roads within Loudoun County because of their function, location and capacity require that uses be set back a certain minimum distance from them. All other provisions of this Ordinance notwithstanding, all buildings and parking, except for agricultural structures and structures located within Village Conservation Overlay Districts (Section 4-2100) and the Joint Land Management Area Districts (2-1000 thru 2-1300), shall be set back as provided in Table 5-14041403(B) or the setback provided in an approved corridor study whichever setback is greater, from the existing or planned rights-of-way, whichever is greater. Residences, accessory structures, and accessory uses built before June 16, 1993 are exempt from this provision pursuant to Section 1-403(D).
- (B) Road Corridor Buffer and Setbacks Matrix, Table 5-1403(B)

Commented [EJ7]: ZOAG: Comment that mixed use districts that are exempt should be expressly stated.

Commented [JE8R7]: RESPONSE: Districts that are exempt from Road Corridor Buffers are stated in the new provision.

(C) Road Corridor Buffer Exemptions: A Road Corridor Buffer shall not be required in the following circumstances.

(1) Agriculture, horticulture, or animal husbandry uses.

Commented [EJ9]: ZOAG: Do we need a specific exclusion for Ag districts adjacent to arterial roads? Like 5-1406(E)(2) today

Commented [EJ10R9]: RESPONSE: Staff feels that a specific provision is unnecessary. Though the current ordinance exempts agricultural districts from arterial roads they are not exempt from buffering from the use across the street. Note that subdivision applications are exempt, so this would only apply to site plan applications. If a specific site circumstance would require a modification than one can be requested under the new regulations.

Commented [EJ11]: ZOAG: Should this be a Type 1?

Commented [EJ12R11]: RESPONSE: The "All other road" categories have been changed to a Type 1. Staff added a category for Minor Collector Roads, requiring a Type 2.

^{**} unless otherwise specified in applicable district regulations

^{***}No buffer required for agriculture, horticulture, or animal husbandry uses

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(2)	Catego	ory B	and	Category	C	roadwa	ys,	as	described	in	the
	FSM.										

(C)(D) Road Corridor Buffer Types. The four (4) types of road corridor buffers that appear in Table 5-1403(B) are as follows.

- (1) Road Corridor Buffer 1. This Buffer is intended to function as an intermittent visual obstruction.
- (2) Road Corridor Buffer 2. This buffer is intended to function as a semi-opaque screen.
- (3) Road Corridor Buffer 3. This buffer is intended to provide a strong impression of total separation between the road and the property.
- (4) Gateway Corridor Buffer. This buffer is intended to provide a boulevard environment creating a sense of enclosure and transition to mark County gateways.

(D)(E) Road Corridor Buffer Width and Plant Requirements, Table 5-1403(D)

Table 5-1403(D) Road Corridor Buffer Width and Plant Requirements				
Road Corridor Buffer Type	Width (ft.)	# of Plant Units Per 100 feet of R/W or Property Line*		
1	10'	20		
2	15'	60		
3	20'	95		
Gateway	100'	**		

*Vehicle entrance may be excluded from length of right-of-way calculation. As measured from where the pavement meets the right-of-way line.

**The Gateway Corridor Buffer is subject to the requirements specified in Section 5-1403(F)

(E)(F) Road Corridor Buffer and Setbacks Requirements and Location

- (1) For parcels along an arterial or major collector road, the Road Corridor Buffer shall be provided as part of the common open space. If allowed within individual lots, the buffer area must be such that it still provides the minimum back and side yard depth required by the Zoning Ordinance outside the buffer area. For subdivisions that require common open space, Road Corridor Buffers shall not be located on individual lots.
- (2) The width of Road Corridor Buffers 1, 2, and 3 shall begin

Section 5-1400 Draft Date: December 11, 2018 Page 4 **Commented [EJ13]:** RESPONSE: Added an exemption for Category B and C roads to clarify that this wouldn't apply to driveways or private access easements.

Commented [EJ14]: DPZ STAFF: We need to clarify that this is where the pavement meets the ROW not to the point of curb return well within the ROW?

Commented [EJ15R14]: RESPONSE: Revised as requested.

Commented [EJ16]: ZOAG: Language needs to be clarified. Could be interpreted that every buffer yard must be placed on its own common open space lot.

Commented [EJ17R16]: RESPONSE: Language has been simplified.

and extend inward from the ultimate right-of-way of said road, and extend a distance corresponding to the length of the proposed development site.. The required width may vary by up to fifty (50%) from the minimum width required at any point along a property line, as long as the buffer width is not reduced to less than ten (10) feet, and the buffer area provided remains equal to the minimum buffer area required along the same property line. Road Corridor Buffers may be set back from the right-of-way line where easements, covenants or natural features would prohibit the required buffer adjacent to the road right-of-way, in which case the required road corridor buffer shall be provided in addition to such easements, covenants, or natural features.

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- (3) All lots created since June 16, 1993 must comply with the unmodified Building Setbacks from Roads.
- (4)(3) For lots as they existed on June 16, 1993, the building setback from a road in Table 5-1403(B) may be reduced on shallow lots to allow a building area of up to 85 feet in depth, measured forward from any rear buffer or setback, whichever is more restrictive. In no case shall the modified building setback from the road be less than the yard or setback required by the underlying zoning district. In these cases, parking setbacks shall be coterminous with building setbacks. No lot may be altered or reconfigured to increase the degree of its shallowness.

(F)(G) Specific Requirements for Gateway Corridor Buffer

Gateway Corridor Buffer Plant Requirements, Table 5-1403(F)(1):

Table 5-1403(F)(1) Gateway Corridor Buffer Plant Requirements				
Plant Material	Minimum Size (at time of planting)	# of Plants per 100 feet of R/W or Property Line		
Large Deciduous Trees	2.52-inch caliper (dbh)	4		
Small Deciduous Trees	82-inch caliper-foot- height	2		
Evergreen Trees	8-foot height	2		
Shrubs	3024-inch height	50		

(1) Design Elements Specific to the Route 50 Corridor:

Commented [EJ18]: ZOAG: Asked that staff review these sections to determine if they are necessary.

Commented [EJ19R18]: RESPONSE: Staff agrees that the first provision should be deleted. The second provision allows for reduced setbacks on shallow lots and should remain.

Commented [EJ20]: NATURAL RESOURCE TEAM (NRT): Asked that 2.5 inch be changed to 2 inch to correspond with industry standard sizing.

Commented [EJ21R20]: RESPONSE: Revised as

Commented [EJ22]: NRT: Delete d.b.h. Change Small deciduous to caliper to correspond with FSM. Make min shrub height 24 to allow more variety.

Commented [EJ23R22]: RESPONSE: Revised as

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- (a) Plant Location: The plants required in Table 5-1403(F)(1) above shall be installed on the parcel as follows:
 - (i) The plants shall be located within the first 50 feet of the required 100 foot Buffer Yard immediately adjacent to the right of way of Route 50.
 - (ii) Each 100 foot segment of frontage shall contain the plants required per 100 linear feet.
 - (iii) The plants shall be located in front of the linear element required in Section 5-1403(F)(2)(b) below.
 - (iv) The plants and the linear element shall be configured to align with the plants and the linear element on adjacent parcels, thereby creating a uniformly landscaped frontage along the right-of-way, where feasible.
- (b) Linear Element: A linear element of not less than 40% of a parcel's frontage shall be provided within the Gateway Corridor Buffer adjacent to Route 50 and shall consist of a stone-faced feature and may also include a fence and/or hedgerow.
 - (i) The stone-faced feature (i.e. wall, pillar, sign, and the like) shall be faced with materials having characteristics similar to native stone. Notwithstanding the Section 5-200 height limitation for fences in front yards, the stone-faced feature shall be a minimum of 3 feet in height. If combined with a fence or hedgerow, the stone-faced feature shall have a minimum length equal to 10% of a parcel's frontage.
 - (ii) Notwithstanding the height limitation of Section 5-200 for fences in front yards, the fence shall be a maximum height of 4.5 feet, as measured from the ground to its highest point, to include posts or other supporting structures. The fence shall be constructed of wood or a wood-like polymer in a rail, paddock, or horizontal board design and shall have a minimum opacity of 50%.

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- (iii) The hedgerow shall consist of a minimum of 10 shrubs planted in a continuous row, planted 36 inches on center and at a minimum height of 30-24 inches. The shrubs used in the hedgerow do not count towards fulfilling the required plant units in Table 5-1403(F)(1) above.
- (iv) The linear element is not required to be a continuous element. However, if any portions of the linear elements overlap, then for the length of the overlapping elements only one element can be counted towards satisfying the required length.
- (v) Areas of existing vegetation used to meet the Gateway Corridor Buffer plant requirements shall be excluded for the purposes of calculating the frontage length for determining the required minimum length of the linear element.
- (vi) The linear element does not have to be located parallel to the road, however, the required length is measured parallel to the road.
- (vii) The linear element can be used towards fulfilling the Peripheral Parking Lot Landscaping requirements in Section 5-1406(B).
- (2) Design Elements Specific to the Route 7 Corridor:
 - (a) Plant Location: The plants required in Table 5-1403(F)(1) above shall be installed on the parcel as follows:
 - (i) The plants may be located within the full 100foot width of the required Buffer Yard immediately adjacent to the right of way of Route 7.
 - (ii) The total plants required for each 100-foot segment of frontage shall contain the plants required per 100 linear feet, except that plants may be relocated within the Buffer Yard where existing environmental constraints or

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public utility easements prevent planting within a particular segment.

- (b) Pollinator Habitat: Plantings within the required Buffer Yard shall consist of plant material that supports pollinator habitat, as follows:
 - A minimum of 50% of the plantings required by Section 5-1403(F)(1) shall consist of native species as specified in the Facilities Standards Manual.
 - (ii) A minimum of 75% of the small deciduous trees and shrubs required by Section5-1403(F)(1) shall produce conspicuous flowers at some point during their growing season.
- (3) Use of Gateway Corridor Buffer: In addition to the uses specified in Section 5-1407(D), the following uses are permitted in the Gateway Corridor Buffer:
 - (a) Storm water management and BMP facilities. Such facilities may not be located within the first 50 feet adjacent to the right-of-way, unless the facility is designed as a water feature in accordance with Section 5-1403(F)(5)(b) below.
 - (b) A water feature, defined as a permanent aqueous element to include a fountain, stream, waterfall, and/or cascade; a wet pond that includes a fountain, waterfall and/or cascade; or a bioretention facility and/or wetland. In the case where a water feature is incorporated in the design of the Gateway Corridor Buffer and located within the first 50 feet immediately adjacent to the right-of-way, the following variations are permitted:
 - (i) The number of shrubs required by Section 5-1403(F)(1) above may be reduced by 50% for the total amount of linear feet of frontage that is occupied by the water feature; and
 - (ii) Notwithstanding Section 5-1403(F)(3)(a)(i) and 5-1403(F)(4)(a)(i) above, regarding required plant locations, for the frontage occupied by the water feature, the required large deciduous trees are to be located between the right-of-way and the water

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feature and the required small deciduous trees, evergreen trees and shrubs may be located around and behind the water feature.

- (4) Reduction: The required width of the Gateway Corridor Buffer may be reduced to 50 feet subject to the Modification and Waiver provisions of Section 5-1408.
- (5) Other Landscaping and Screening: Where the Ordinance requires the screening of parking, service and loading areas, and utility equipment from roads, such screening as may be necessary shall be in addition to the Gateway Corridor Buffer plantings and shall be provided within the Gateway Corridor Buffer, but outside of the first 50 feet of the required 100-foot-wide Buffer Yard as measured from the right-of-way.

(G)(H) Road Corridor Buffer Special Situations

(1) Any landscaping required by this Section that would fall within the area of a recorded sight distance easement granted to the County of Loudoun or the Commonwealth of Virginia shall not be subject to the minimum—maximum plant percentage of Section 5-1407(C)(36) for ornamental grasses and perennials to promote the use of low-growing plant material to meet the Road Corridor Buffer standards within such sight distance easement.

5-1404 Buffer Yards

(A) Buffer Yards, General Provisions.

- Side and Rear Buffer Yards shall be provided in accordance with the Use Buffer Yard Matrix set forth in Section 5-1404(B), and in accordance with the provisions of this Section.
- (2) Buffer Yards shall be provided on the lot whose general use category is indicated in the left column of the matrix where it is adjacent to a land used or zoned for uses indicated across the top of the matrix
- (3) In those instances, where a proposed use and/or an existing use on the abutting property is not identifiable under the general use categories in the matrix, the Zoning Administrator, using the matrix as a guide, shall determine to what extent buffering and screening shall be provided.
- (4) Where the structure or lot or development is to contain more than one use or category of uses as presented in the matrix,

Commented [EJ24]: DPZ STAFF: There is no minimum applicable. This should be maximum.

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- the more stringent requirements of the matrix shall apply at the outside boundary of the parcel.
- (5) In situations where a development is adjacent to multiple uses, the buffer required for each use shall be provided along the corresponding section of property line.
- (B) **Use Buffer Yard Matrix, Table 5-1404(C).** Note that required Buffer Yards may require a different width than a required yard, setback or building restriction line.



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Commented [EJ29]: PRC: is this needed?

Commented [EJ25]: FSM PUBLIC REVIEW COMMITTEE (PRC): Questions the value in requiring a Type A buffer for SFD adjacent to vacant land.

opposed to both uses today.

have no buffer.

category.

Commented [EJ26R25]: RESPONSE: A Type A is appropriate for ensuring shared responsibility for overall

Commented [EJ27]: DPZ STAFF: This is confusing.

Commented [EJ28R27]: RESPONSE: "Rural

buffering. This concept allows the matrix to only require the more intense use to provide the more stringent buffer as

Could be misinterpreted that all uses in the RC district would

Commercial" has been removed. Most commercial uses in

Agricultural Districts would require 5-600 buffer standards and if not would be subject to the Commercial/Retail

Commented [EJ30R29]: RESPONSE: Footnote has been deleted. Article 8 defines vacant land.

s association amoss such open space is designated for

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active recreation on an approved development plan.

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- Buffer Type A: Aesthetic. This Buffer is intended to function as an intermittent visual obstruction, and create the impression of spatial separation without eliminating visual contact between uses.
- (2) Buffer Type B: Semi-opaque. This Buffer is intended to function as a semi-opaque screen.
- (3) Buffer Type C: Opaque. This buffer is intended to provide the greatest degree of screening feasible and minimize visual contact between uses, creating a strong impression of total separation.

(D) Buffer Yard Widths and Plant Requirements.

Table 5-1404(D). Buffer Yard Width and Plant Requirements				
Buffer Yard Type	Width (ft.)	# of Plant Units Per 100 Linear feet of Property Line Required Buffer Yard		
A	10'	30		
В	20'	80		
С	25'	120*		

*A six (6) foot high fence, wall, or berm, providing a minimum opacity of 95% is required to run the length of the required buffer yard between the proposed use and the required plant units except that the required plant units may be planted on a berm.

(E) Determination of Buffer Yard Requirements. To determine the type of Buffer Yard required between two (2) adjacent uses on separate parcels, apply one of the following procedures:

(1) Proposed Development Adjacent to an Improved Property that Contains a Pre-existing Use or Vacant Land. The developing property must provide the buffer yard type indicated in Table 5-1404(C) and install plant units in accordance with Table 5-1404(D). Commented [EJ31]: DPZ STAFF: Is it confusing that this says provided per 100 feet of property line but the buffer yard is allowed to stop at the limits of the use?

Commented [EJ32R31]: RESPONSE: Revised to clarify.

Commented [EJ33]: ZOAG: Plants should be allowed to be placed on the berm.

Commented [EJ34R33]: RESPONSE: Revised as recommended.

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(2)	Proposed Develop	ment in Mixed	Use Certain	Planne
	Zoning Districts.	The developing p	roperty mus	t provid
	buffer yards in acco	ordance with the us	e limitations	specified
	in the PD-CC, PD-	-CV, PD-TREC, F	D-TRC, PD	-TC, and
	PD-MUB applicable	ezoning districts.		

(3) Proposed Mixed Use Development in Any Other District: The developing property shall provide buffer yards in accordance with Table 5-1404(C) and install plant units in accordance with Table 5-1404(D) based on the most intensive use proposed on the property.

(F) **Buffer Yard Location.**

- (1) Required buffer yards shall be provided between the adjacent property line and the proposed use, and may be configured to surround the proposed use, unless such configuration would render the required buffer yard ineffective.
- (2) The location of required buffer yards may vary between the adjacent property line and the proposed use so long as the required plant units are planted within the required width throughout the full length of the buffer yard.

Commented [EJ35]: ZOAG: Comment that mixed use districts which are exempt should be expressly stated.

Commented [EJ36R35]: RESPONSE: Revised to state districts which exempt 5-1400 for internal uses.

Commented [EJ37]: ZOAG: How does this address zoning districts which are not "mixed use districts" per se, but may allow a mix of uses that could integrate horizontally without negative impact.

Commented [EJ38R37]: RESPONSE: Horizontally mixed uses are addressed in the revised matrix. Matrix has been adjusted to better align like/similar uses and only require the more stringent use to provide the more intense buffer. In a truly unique situation where the design of a horizontally mixed development justifies altered buffers, an administrative modification can be requested.

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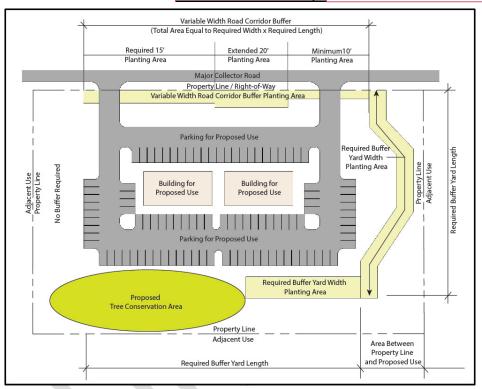
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Commented [EJ40R39]: RESPONSE: Revised as requested.



(G) Buffer Yard Special Situations.

- (1) **Wayside Stands or Other Temporary Uses**: When the adjacent land is used for a wayside stand or other temporary use, the Buffer Yard shall be determined as if the adjacent property were vacant as provided in Section 5-1404(E).
- (2) Perimeter Development Buffer: Unless otherwise specified by district regulations, a permanent common open space buffer fifty (50) feet in depth, planted with a Buffer Type B, shall be provided around the perimeter boundary of a development where single family attached or multi family residential uses are proposed to abut existing or planned single family detached residential uses.

Commented [EJ41]: ZOAG: Perimeter buffer should be removed and rely on matrix.

Commented [EJ42R41]: RESPONSE: Staff agrees. Perimeter buffer deleted.

(3)(2) Cemetery, Burial Ground, and Grave Buffer: The following standards shall apply to all existing cemeteries burial grounds, and graves not developed through Section 5-637, Eexcept for a cemetery, burial ground, or grave for pet animal remains or when a cemetery, burial ground, or grave is accessory to a church, the following standards shall apply:

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- (a) The delineated perimeter boundary of a cemetery, burial ground, or grave shall be physically demarcated with a fence between a minimum of three feet and a maximum of four feet in height, or other perimeter demarcation as approved by the Zoning Administrator or designee. No land disturbing activity shall be permitted within the delineated perimeter boundary of the cemetery, burial ground, or grave except for land disturbing activity associated with the excavation and filling of grave shafts, clearing of invasive vegetation on the surface, excluding any species that were planted in association with burials and thus are part of the cultural landscape, and construction of the perimeter demarcation
- A twenty-five (25)-foot protection buffer shall be established outside of and abutting the delineated perimeter boundary of the cemetery, burial ground, or grave to protect the physical integrity of existing burial and to preserve the natural and cultural features associated with the cultural landscape. No land disturbing activity shall be permitted within the protection buffer except land disturbing activity associated with construction of the perimeter demarcation required by Section 5-1404(G)(3)(a), construction associated with pedestrian access, and clearing of invasive vegetation on the surface, excluding any species that were planted in association with burials and thus are part of the cultural landscape. This protection buffer may only be modified by Minor Special Exception in accordance with the provisions of Section 6-1300.
- (c) An additional twenty-five (25)-foot preservation buffer shall be established outside of and abutting the protection buffer required under Section 5-1404(G)(3)(b) above to create separation from adjacent land uses to preserve the historical context of the existing cemetery. No land disturbing activity

Section 5-1400 Draft Date: December 11, 2018 Page 15 Commented [EJ43]: ZOAG: The permitted land disturbance in within this section does not address commercial cemeteries to allow things like wells, paths, lawn maintenance, etc.

Commented [EJ44R43]: RESPONSE: This should only apply to existing cemeteries not developed as commercial cemeteries through Section 5-637. Added text to clarify.

Commented [EJ45]: HERITAGE COMMISSION (HC): Some invasive species may have been intentionally installed for commemoration. Need to ensure that this historic integrity is not disturbed.

Commented [EJ46R45]: RESPONSE: Language has been added to exclude any species that is part of the cultural landscape or used to mark a grave.

Commented [EJ47]: PRC: Describe the intent of the buffer so that a modification can be justified.

Commented [EJ48R47]: RESPONSE: Purpose of the required buffer has been added.

Commented [EJ49]: PRC: Describe the intent to the buffer so that a modification can be justified.

Commented [JE51]: PRC: This buffer should be eliminated or at least allow land disturbance without a treatment plan.

ZOAG: Should grading be allowed just not buildings or parking?

Commented [EJ52R51]: RESPONSE: Staff research has concluded that every cemetery is unique and that 50' of preservation is necessary to capture most scenarios. Having a modification process allows staff to review each cemetery on a site by site basis to ensure that the historical context is maintained. If land disturbance is necessary and alternative means of preservation can be provided then an administrative modification can be requested. Additionally, the current draft is a compromise on what the Heritage Commission originally asked for, which was a 50' buffer that cannot be modified.

Commented [EJ50R49]: RESPONSE: Purpose of the required buffer has been added.

416 shall be permitted within the preservation buffer 417 except land disturbing activity associated with 418 construction of the perimeter demarcation required by Section 5-1404(G)(3)(a), construction associated 419 420 with pedestrian access, and clearing of invasive 421 vegetation on the surface, excluding any species that 422 were planted in association with burials and thus are part of the cultural landscape. The Zoning 423 Administrator or designee may approve a waiver or 424 modification of the preservation buffer in accordance 425 with the requirements of Section 5-1408. 426 427 428

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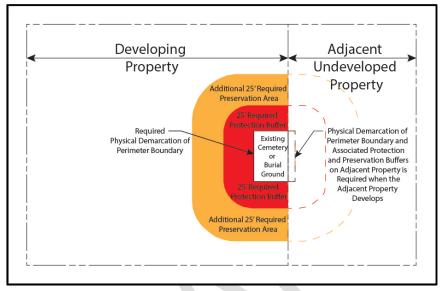
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- (d) When a developing property adjoins a property containing an existing cemetery, burial ground, or grave, the required buffer shall be measured from the delineated boundary of the cemetery, burial ground, or grave, as required by the Facilities Standards Manual, and provided on the developing property to the extent the buffer extends therein.
- (e) These provisions do not preclude removal and reinterment of burials in accordance with the Code of Virginia. The protection and preservation buffers would not apply to any cemetery, burial ground, or grave that has been removed from a property in accordance with the Code of Virginia.
- (e)(f) These provisions do not preclude existing cemeteries, or burial grounds from actively performing burials within the delineated perimeter boundary. Any expansion of a cemetery beyond the delineated perimeter boundary shall be subject to the provisions of Section 5-637.

Cemetery, Burial Ground, and Grave Buffer Example

Commented [EJ53]: DPZ STAFF: I think we need this to provide clarity that a cemetery can still expand.

Commented [EJ54R53]: RESPONSE: This provision was added to clarify that a cemetery may expand.



Setbacks and Buffer Yards for Specific Uses from Section 5-600: For Specific uses in Section 5-600 that reference this section for Landscaping, Buffering, and Screening requirements shall meet the following standard:

a) A minimum 50 foot setback adjacent to any existing lot four (4) acres or less in size, or any existing lot that contains a house within 300 feet of the adjacent property line shall be landscaped and screened with solid fencing and/or landscaped area that provides year-round screening and is equivalent to a Buffer Yard B for side and rear yards, and a Road Corridor Buffer 2 for front yards.

- The required fencing and/or landscaped area may be configured to surround the proposed use.
- (ii) The use of natural topography, vegetation, and trees that provide screening at the density, depth and height of the Buffer Yard B shall be credited towards this Buffer Yard B requirement.

(i)(iii) Any property subject to the setback and

Section 5-1400 Draft Date: December 11, 2018 Page 17 **Commented [EJ55]:** ZOAG: Language should be revised to clarify when this buffer is applicable, and when the matrix is not.

Commented [EJ56R55]: RESPONSE: Revised to clarify.

Commented [EJ57]: DPZ STAFF: Added this provision to clarify front buffer yard requirement, as shift to road corridor buffer and exemption of Category B and C roads could result in no front buffer in certain circumstances.

buffer requirements of this section, as specified in Section 5-600, shall be exempt from the Buffer Type specified in Table 5-1403(B), and the Buffer Yard Matrix of Table 5-1404(C). The building and parking setback requirements of Table 5-1403(B) shall be observed.

Commented [EJ58]: DPZ STAFF: Revised to clarify

5-1405 Screening of Certain On-site Functions

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- (A) On-site functions, to include loading areas, dumpsters, outside storage areas, maintenance areas, mechanical equipment, and utility equipment, shall be screened from view from all public streets and adjoining properties using at least one of the following screening options:
 - A minimum six (6) foot high opaque fence or wall, the height of the fence or wall shall be no lower than the function/items being screened. An appropriate gate shall be provided, if applicable.
 - (2) A three (3) foot high berm with evergreen plantings of six(6) feet in height at time of planting.
 - (3) For mechanical and similar equipment, any architectural element compatible with the building is acceptable, as long as it screens the view of the equipment.

5-1406 Parking Lot Landscaping and Screening Requirements.

- (A) Interior Parking Lot Landscaping: Any parking area or parking lot that contains twenty (20) or more parking spaces, except areas used principally for accessory storage of vehicles, shall include interior parking lot landscaping, as follows:
 - (1) At least five (5) percent of the gross area of the parking lot shall be comprised of landscaped open space. The gross area of the parking lot shall include all paved areas within the parking lot including areas for vehicle ingress/egress and crosswalks, but excluding other pedestrian facilities within the parking lot.
 - (2) Landscaped open space provided to meet the requirements of this section shall be no less than 125 130 square feet with a minimum width of five (\$\frac{1}{2}\$) feet.
 - (3) Landscaped open space shall be provided at the each end of every row of parking, equal in length to the adjoining parking space. Where less than eight (8) spaces are

Commented [EJ59]: NRT: 130 square feet is consistent with minimum planting area for large deciduous trees.

Commented [EJ60R59]: RESPONSE: Revised for consistency.

Commented [EJ61]: NRT: To avoid conflicts with door opening, minimum width should be 7 feet.

Commented [EJ62R61]: RESPONSE: Revised as requested.

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- proposed in a single row, landscaped open space shall only be required at one end of the row.
- (4) Required landscaped open space shall be planted with ten (10) plant units per 150 square feet and shall be designed in such a way that no parking space is more than eighty (80) feet from a large deciduous tree.
- (5) A minimum of seventy-five (75) percent of the total plant units required for landscaped open space shall consist of large deciduous trees. Perennials shall only be used where County and VDOT sight distance standards would otherwise conflict with using taller vegetation.
- (6) Evergreen trees shall not be used to meet the interior parking lot landscaping plant unit requirement are prohibited within the interior of a parking lot.
- (5)(7) No trees or shrubs shall be planted closer than three (3) feet from any curbs or pavement.
- (6)(8) Light poles may be placed within landscape islands, except no large or small deciduous trees planted to meet the requirement of Section 5-1406(A)(4) shall be located within 20 feet of a light pole.
- (7)(9) Areas used principally for accessory storage of vehicles do not require interior islands if such areas are screened from public streets and adjacent properties in accordance with Sections 5-1403, 5-1404, and 5-1405, respectively.

Commented [EJ63]: NRT: Evergreens should not be allowed in parking lots for safety concerns due to blocking views of vehicles and pedestrians, especially children; also can create isolated ice spots and snow loads can cause them to lean into parking spaces in the winter.

Commented [EJ64R63]: RESPONSE: Revised as requested. Discuss with ZOAG as the previous text was per ZOAG discussion.

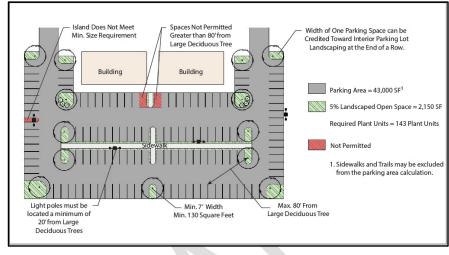
Commented [EJ65]: NRT: Text should be added that no trees or shrubs shall be planted closer than 3 feet from any curbs or pavement.

Commented [EJ66R65]: RESPONSE: Revised as recommended.

Commented [EJ67]: STAFF: As currently written could have conflict with trees in a buffer yard being closer than 20 feet to a light pole. Need to clarify applicability.

Commented [EJ68R67]: RESPONSE: Language added to clarify that trees cannot count toward meeting the interior parking lot landscaped open space plant units.

Commented [EJ70R69]: RESPONSE: Graphic has been revised.



- (B) Peripheral Parking Lot Landscaping: Except where a parking area or parking lot adjoins a buffer Type B or C, or a Road Corridor Buffer Type 2, 3, or a Gateway Corridor Buffer as required by this Ordinance, any parking area or parking lot that contains twenty (20) or more parking spaces shall include peripheral parking lot landscaping as follows:
 - (1) Parking and vehicular traffic circulation lanes shall be screened with either berms, landscaping, or a combination of both to a minimum height of thirty (30) inches. Berms shall have a slope no greater than 2:1. Such berms and/or landscaping shall be located between the parking area or parking lot and the abutting property line or right of way. Where abutting parcels share a common access drive or parking lot circulation travelway, no such screening is required.
 - (2) Where landscaping is proposed, a minimum of fifty (50) plant units per 100 linear feet shall be required within a continuous landscape strip ten (10) feet in width. A minimum of seventy-five (75) percent of the total plant units required shall consist of evergreen shrubs located between a parking area or parking lot and the property line or right-of-way.

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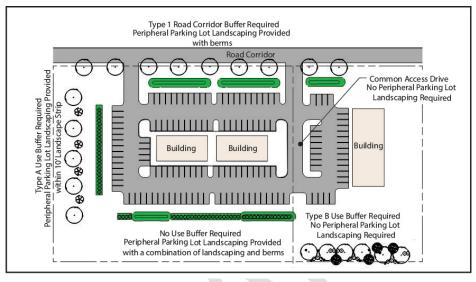
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Peripheral Parking Lot Landscaping Example



Requirements for Parking Lots in Residential Districts. Where parking lots consisting of more than ten (10) spaces are proposed or required in residential districts, a ten (10) foot wide landscaped open space area shall be required between the parking lot and any adjoining street or lot zoned or planned for residential uses. The landscaped open space area shall be guarded with wheel stops or curb and gutter and planted in grass and/or shrubs. No trees or shrubs shall be planted closer than 3 feet from any curb or edge of pavement.

5-1407 **General Landscape Provisions**

Landscape Plan.

- A landscaping plan meeting the requirements of the Facilities Standards Manual, including a parking lot landscape and screening plan, shall be submitted as part of every final site plan required by the provisions of Section 6-701.
- The landscaping required by this Section and depicted on such landscape plan shall be designed by a licensed landscape architect or other licensed professional as permitted by the Code of Virginia and shall be completed or bonded in accordance with current County requirements

Commented [EJ71]: NRT: Text should be added that no trees or shrubs shall be planted closer than 3 feet from any curbs or pavement.

Commented [EJ72R71]: RESPONSE: Revised as

prior to approval of any Certificate of Occupancy.

(3) Planting requirements shall be determined using the plant unit equivalents shown in Table 5-1407(B).

(B) Plant Unit Equivalents

Table 5-1407(B), Plant Unit Equivalents		
Plant Type	Plant Units per One (1) Plant Type	
Large Deciduous Tree	10	
Evergreen Tree	6	
Small Deciduous Tree	5	
Shrub	2	
Ornamental Grass	1	
Perennial	0.25	
* Minimum Plant Size in accordance Facilities Standards Manual (FSM)		

- (C) To achieve the purpose of required buffers, the following shall apply:
 - (1) A combination of two or more of the following plant types shall be used to achieve the desired buffering effect: large deciduous trees, small deciduous trees, evergreen trees, shrubs, ornamental grass, and perennials, except that the Road Corridor Type 1 may be planted with one hundred percent (100%) large deciduous trees.
 - (2) A maximum of fifty percent (50%) of the required plant units may be large deciduous trees. The Road Corridor Type 1 is exempt from this maximum.
 - (3) A maximum of fifty percent (50%) of the required plant units may be evergreen trees. A minimum of ten percent (10%) of the required plant units for a Type C Buffer must be evergreen trees.
 - (4) A maximum of sixty percent (60%) of the required plant units may be small deciduous trees.
 - (5) A maximum of thirty percent (30%) of the required plant units may be shrubs. A minimum of one-third (1/3) of the required shrubs shall be evergreen.
 - (6) The use of ornamental grasses, perennials and mulched beds is encouraged. When used, ornamental grasses and perennials (combined) shall compose a maximum of twenty-five percent (25%) of the total plant units required.

(7) The limits on the percentages of plant types listed in Paragraphs 1 through 6 above shall be applied along each property line where the buffer is required. The maximum percentages shall solely apply in determining the quantity of a given plant type that can be counted toward meeting the plant unit requirement, and shall not preclude a property owner from planting additional plant material, if desired.

(D) Use of Buffer Yards and Road Corridor Buffers.

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- Passive recreation and pedestrian, bicycle or equestrian trails are permitted in Buffer Yards and Road Corridor Buffers, provided the required plant units can still be achieved.
- (2) Utility easements may be included within Buffer Yards and Road Corridor Buffers provided the utility requirements are compatible and the required plant units can still be achieved.
- (3) Driveway entrances and entrances connecting adjacent parking lots or developments may cross a Buffer Yard or Road Corridor Buffer.
- (4) Signs, pursuant to Section 5-1200, may be located in Buffer Yards and Road Corridor Buffers.
- (5) Storm water management features such as bioretention areas and rain gardens may be located in Buffer Yards and Road Corridor Buffers provided the required plant units can be achieved.
- (E) Landscape Installation. The installation of all landscaping shall be in accordance with the procedures established by the American National Standards Institute, ANSI A300 (Part 6) and companion publication Tree Planting, Best Management Practices MD, DC, VA Landscape Contractors Association; Landscape Specification Guidelines.
 - (1) At the time of planting, all trees and shrubs shall meet the requirements of the American National Standards Institute, American Standard for Nursery Stock, ANSI Z60.1-2014. The minimum sizes required for each plant type are as follows:
 - (a) All deciduous trees shall have a minimum caliper of one (1) inch diameter at breast height (d.b.h., measured at 4 and ½ feet above ground level).

Commented [EJ73]: NRT: Amend this reference to match what is being proposed in the FSM.

Commented [EJ74R73]: RESPONSE: Revised as recommended.

Commented [EJ75]: NRT: Remove references to diameter at breast height. This conflicts with caliper measurement.

Commented [EJ76R75]: RESPONSE: Revised as recommended.

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- (b) Evergreen trees shall be a minimum of six (6) feet in height
- (c) Shrubs shall have a minimum height of eighteen (18) inches.
- (2) No minimum height is required for groundcover, grasses, or perennials. Walls, fences, and/or berms provided within a Buffer Yard shall be in addition to required plant units.
- (F) Maintenance. The owner, or his agent, shall be responsible for the maintenance, repair and replacement of all required landscape materials and screening and buffering as may be required by the provisions of this Section.
 - All plant material shall be tended and maintained in a healthy growing condition, replaced when necessary and kept free of refuse and debris.
 - (2) Fences and walls shall be maintained in good repair. Openings within the barriers may be required by the Zoning Administrator for accessibility to an area for necessary maintenance.

5-1408 Waivers, Modifications, and Appeals.

- (A) Landscaping Waivers and Modifications. Unless otherwise specified, the Zoning Administrator may approve waivers or modifications to the requirements of this section as part of the site plan process upon finding that site conditions make a specific requirement either impracticable or ineffective relative to accomplishing the impact mitigation and site design objectives of this Ordinance. No such modification shall be approved for the primary purpose of achieving the maximum density on a site. Site conditions that may justify a waiver or modification include, but are not limited to, the following:
 - Topography, soil, vegetation, or other existing conditions are such that full compliance is impossible or impracticable, or that improved environmental quality would result from implementation of alternative standards.
 - (2) Space limitations, unusually shaped lots, prevailing practices in the surrounding neighborhood justify alternative standards for in-fill sites, properties encumbered by utility easements, and/or for improvements and redevelopment in older communities.
 - (3) Change of use on a developed site increases the required

Section 5-1400 Draft Date: December 11, 2018 Commented [EJ77]: ZOAG: Staff should consider if an applicant can submit a waiver with a legislative application.

Commented [EJ78R77]: RESPONSE: After additional consideration, Staff feels that these standards are more appropriate when reviewing specific design proposals. If submitting with legislative application should be a ZMOD

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Buffer Yard more than is feasible to provide.

- (4) Safety or security conditions make alternative standards necessary.
- (B) The Zoning Administrator may attach conditions to any waiver or modification to assure that the results of the waiver or modification will be in accordance with the purpose and intent of this section.
- (C) Each request for a waiver or modification shall include the following components:
 - (1) **Justification:** A written narrative justifying the request shall be provided with the following elements:
 - (a) Identification of the specific landscaping or Buffer Yard requirement from which relief is requested.
 - (b) Description of conditions that necessitate the waiver or modification and corresponding graphic exhibits that clearly delineate how the proposed modified or waived landscaping or Buffer Yard will achieve an equal or better outcome relative to mitigation of impacts between uses and/or site design than would otherwise be achieved by the unmodified ordinance requirement.
 - (2) Alternative Design Option or Cemetery, Burial Ground, and Grave Treatment Plan:
 - (a) When a waiver or modification is requested, except per 5-1408(C)(2)(b) below, an alternative design option that will achieve the purpose and intent of the required landscaping or Buffer Yard being modified or waived shall be required. The alternative design option shall depict and tabulate the quantity, type, location, and size of all proposed plant units and any other proposed design elements.
 - (b) When a waiver or modification is requested to modify the cemetery, burial ground, and grave preservation buffer required by Section 5-1404(G)(3)(c), a Cemetery, Burial Ground, and Grave Treatment Plan shall be required in accordance with the Facilities Standards Manual. Such treatment plan shall indicate how the modified buffer will achieve the purpose and intent of the required preservation buffer, and address

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how the context of the cemetery, burial ground, or grave is being preserved through alternative mitigation techniques.

- (3) Design Evaluation: Site elevations, plan views, perspectives, and/or pictures may be requested by the Zoning Administrator to evaluate administrative waiver and modification requests.
- (D) **Reduction of Gateway Corridor Buffer.** When a reduction in the width of a Gateway Corridor Buffer is requested pursuant to Section 5-1403(F)(4), the alternative design option required by Section 5-1408(C)(2)(a) above shall include the design elements specified by Section 5-1403(F)(2) or Section 5-1403(F)(3), whichever is applicable.
- (E) Road Corridor Building and Parking Setbacks. Modifications to the Road Corridor building and parking setbacks of Table 5-1403(B) may be allowed by Minor Special Exception to maintain consistency with the streetscape established by existing development on adjacent properties.
- (F) Uses allowed by special exception, or variance shall be required to provide Buffer Yards as determined by the BZA or Board of Supervisors using the matrix as a guide. In such event, the requirements of such special exception, variance, or proffered rezoning shall govern over the requirements of this section.
- (G) Appeals. Any person aggrieved by a decision of the Zoning Administrator may appeal such decision in accordance with the provisions of Section 6- 1700.